DOCUMENT RESUME

ED 256 870 CE 041 263

AUTHOR Owens, Thomas R.
TITLE Using Student Follow-up Results to Lead toward Excellence.
PUB DATE Oct 84
NOTE 13p.; Paper presented at the Annual Meeting of the Evaluation Research Society and the Evaluation Network (San Francisco, CA, October 1984).
PUB TYPE Speeches/Conference Papers (150) -- Information Analyses (070)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Educational Research; *Followup Studies; Graduate Surveys; *High School Graduates; Needs Assessment; Program Improvement; *Research Design; *Research Methodology; Research Needs; Research Problems; Research Utilization; Secondary Education; *Vocational Education; *Vocational Followup
IDENTIFIERS Oregon

ABSTRACT

Although some school districts conduct follow-up studies of their high school graduates, few have systematically used the information to improve their educational programs or to guide policymaking. Weaknesses of typical vocational education follow-up studies include the following: avoidance of comparisons with nonvocational students, failure to include dropouts or other nongraduates in the survey population, failure to focus on critical issues facing the schools, administration of surveys too soon after students have left high school and before they have had adequate experience in the real world, concentration only on self-reported information rather than on a combination of self-reported data and student transcript information, and failure to involve vocational educators and other staff in determining what information from former students would be pertinent to program revision. Recently, Oregon conducted a three-year high school follow-up study. Included among the seven recommendations for improving the design and administration of follow-up studies that grew out of the Oregon experience were the following: participating schools should determine the content of follow-up instruments; data from follow-up surveys should be combined with information from students' transcripts and permanent records; and schools should allow time for staff and administrators to discuss their local follow-up study and identify implications for improving both vocational education programming and future follow-up survey instruments. (MN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED256870

CE

USING STUDENT FOLLOW-UP RESULTS TO LEAD TOWARD EXCELLENCE

by
Thomas R. Owens

Education and Work Program
Northwest Regional Educational Laboratory
300 S.W. Sixth Avenue
Portland, Oregon 97204

Paper presented at the Evaluation '84 annual meeting of the Evaluation Research Society and the Evaluation Network, San Francisco, October 1984.

CE 041263

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

M Rogers

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

USING STUDENT FOLLOW-UP RESULTS TO LEAD TOWARD EXCELLENCE

While most businesses would not think of making major investments in new products without some type of client marketing activities, educators are slow to use client information to help guide their decisions. While some school districts conduct followup studies of their high school graduates, few have systematically used the information to improve their educational programs or to guide policy making. Why has this been the case?

In the past, high schools have often limited followup studies to those who were vocational education students since federal regulations have required such followups. Generally these studies have been conducted one year after high school graduation and seldom involve those who were non-graduates or who were not classified as vocational education students. Questions asked of the vocational graduates are typically confined to the static areas suggested in federal legislation. These areas include the former students' current employment or training status, earnings, and perceived relevance of their job or postsecondary education to the vocational area studied in high school. Finally, the information collected from these high school vocational education followup studies is generally shipped off to the state department of education with little or no attention paid to the findings by the local school or district. In fairness, it should be pointed out that there are a few vocational instructors who do maintain contact with their former students, help them get jobs, and consider their needs as they plan revisions in their curricula.

Problems in typical vocational education followup studies are that they have often: (1) avoided comparisons with nonvocational students, (2) ignored dropouts and other non-graduates, (3) failed to focus on critical issues facing the schools, (4) surveyed former students too soon after they have left high school and before they have had adequate experience in the real world, (5) concentrated only on self-report information instead of also including student transcript or file data, and (6) failed to involve vocational educators and other staff in determining what information from former students would be useful to know in revising programs.

Given this backdrop of existing conditions, this paper will describe attempts in Oregon to plan and conduct a high school followup study that should lead toward excellence. The Oregon Department of Education released a request for proposal to conduct a three-year followup stdy of vocational and nonvocational education graduates and early leavers. In addition to the few federally mandated issues, they added some others of interest to people within the state. The Northwest Regional Educational Laboratory (NWREL) submitted a proposal and was awarded a contract to coordinate the followup study with at least ten schools.

After receiving the contract, NWREL staff worked through the state's fifteen regional vocational education coordinators, who are paid jointly by the state and by educational service districts, to announce the opportunity for additional schools to become involved in a "user-focused" followup study. Nine additional schools signed up agreeing to collect the data at their own expense and reimburse NWREL for costs in data analysis and reporting. Each school or district agreed to prepare their own final report while NWREL prepared a statewide report.

After beginning design work on this study, the NWREL staff realized the opportunity to improve the study by adding questions related to the issue of increased high school graduation requirements in math and science, expanding it to more former nonvocational students, and examining the relationship of students outcomes to essential program features existing in the vocational programs of the participating 19 schools in 1980-81.

In order to build a sense of local ownership and to help the study focus on issues of concern to the participating schools, the researchers prepared an initial survey instrument based on conversations with staff in some of the participating schools. A statewide meeting was then held to bring together a representative from each of the participating schools. At this meeting, participants were asked to critique a draft copy of the instrument, determine high, medium and low priority questions, and suggest additional critical areas they felt had been omitted.

Recognizing that while schools within the state face many common problems, there are certain issues that may be unique to only one or several schools. The NWREL staff allowed schools to select up to four unique questions to be added to the common core questions for the survey. They were also told that rather than prepare a school report addressed to the state department of education (our investigation found schools hated to prepare such reports and they were seldom if ever read at the state), they could instead address the report to their local school board. Immediately this gave the context for a more meaningful audience and allowed school representatives to start thinking about the type of information their administrators and school board members would find useful.

A prior discussion with vocational directors in some of the districts revealed that prior followup studies had only minimal use in decision making. As we pressed for concrete examples of decisions influenced by specific findings, we generally came up with blanks or vague responses. Where we did find clear examples, we tended to use such questions in the new study. For example, one district had asked former students whether they would be willing to move out of their town in order to accept employment. Since three quarters of the respondents said no, the district decided to focus on vocational preparation for occupations that had a high probability of employment in the local community.

The follow-up survey was designed for use as either a mailed questionnaire or a telephone interview. Occupational information obtained included the former students' current and recent occupational status, salary, job satisfaction, relevance of their high school experience, career goals and when they were decided, and factors influencing the selection or change of career goals. Post high school educational information obtained included their current and recent educational status since completing high school, areas of major, grade point average, reasons for pursuing postsecondary education, satisfaction with their postsecondary education and relevance of specific high school courses to their education after high school. Students also described and rated the quality of their high school formal and informal experiences and indicated how many years of math and science they feel should be required of all high school students. Student demographic information as well as the courses and grades received in vocational education, science and math were recorded by the local schools based on an analysis of student transcripts and permanent files. Student

participation in secondary vocational education was analyzed so as to distinguish five patterns of vocational participation that have also been used in the National Longitudinal Study of high school graduates. Recent procedures developed by the National Center for Research in Vocational Education were followed in determining levels of participation in vocational education. Such analyses allowed us to go beyond the questionable practice of comparing only two groups (vocational versus nonvocational students) and instead explore differences between students who had intense concentration in a single vocational specialty versus other patterns of participation including students who explored five or six vocational areas while in high school. The simplistic comparison of vocational and nonvocational students is misleading for a number of reasons including the fact that 50 percent of the nonvocational cluster students reported taking at least one semester of vocational classes in high school.

Vocational education students were grouped into four patterns of participation: concentrators, limited concentrators, concentrator explorers, and explorers. These profile classications are based upon five concepts developed by Paul Campbell and others at the National Center for Research in Vocational Education: (1) intensity (the number of credits in a vocational specialty), (2) diversity (the number of areas in which vocational credit was earned), (3) continuity (number of grades in which the specialty was pursued), (4) supportive diversity (number of nonspecialty credits logically career related to the specialty), and proximity (how close were the courses taken before graduation). (Campbell, Orth and Seitz, 1981).

In Campbell's study, using data from the National Longitudinal Survey New Youth Cohort, concentrators took an average of six vocational credits over a three-year period. Limited concentrators took about half the number of credits as concentrators in their last two years. Concentrator/Explorers took slightly fewer course credits (approximately two and one-half) and completed the work in a two-year time frame. The number of areas students sampled appeared to be limited. The explorer group took courses in three or more different areas but did not achieve any level of specialization.

Using Campbell's four classifications of vocational students, we were interested in determining what differences these groups displayed on certain outcome measures. We began by using only former state-certified vocational cluster high school students who are currently working full time. An analysis of variance for the 302 former students indicated significant differences (F 4.72, P .01) between thse levels of vocational students in terms of their rating of how helpful they felt their high school education was in preparing them for their present job. The concentrators had significantly higher ratings on this outcome than did the other three groups as shown by a Duncan multiple range test (p .05). The other three groups were not significantly different from each other. The same pattern of results occurred but with even higher levels of significance (F = 17.9, p .001) when the questions focused more specifically on how useful high school vocational courses were in preparing them for their present job. Again, the concentrators felt their vocational courses were significantly more useful than did the other three groups.

A second set of comparisons was run for state certified vocational cluster students currently attending postsecondary school fulltime. The analysis of variance indicated significant differences among groups ($F = 6.87$, $p < .001$) when they rated the usefulness of their high school vocational edcation courses to their current education. Again the concentrators rated the usefulness of the high school vocational courses significantly higher than the other groups.

The full findings from the followup study are reported elsewhere (Owens, 1984). In this paper, I will highlight only a few findings that have implications for improving vocational education and will then conclude with several recommendations for improving future student followup studies.

Unlike previous followup studies that ask whether students are currently employed or in school, we felt it important to determine also whether students had ever attended school in the three years since high school. To our surprise, we found that approximately three-quarters of both vocational and nonvocational high school students had participated in postsecondary education at least once. Fifty-one percent of the vocational and 61 percent of the nonvocational students attend fulltime. Interestingly, eight percent of the former vocational and nine percent of the nonvocational students are enrolled in a liberal arts major. A key implication is that high schools should aim to prepare <u>all</u> students to be successful in education beyond high scool, not simply those considered academically oriented.

The myth that high school students enroll in vocational education to avoid taking courses in math and science seems to be destroyed by our findings. For example, vocational students in this study took

approximately the same number of units of math as nonvocational students (2.4 versus 2.9 credits), received about the same grades (2.5 versus 2.6) and wished they had taken more math in high school (60 percent versus 52 percent). A significant difference does occur, however, in the type of math taken. For example, only three percent of vocational students took calculus while nine percent of the nonvocational students took it. Twenty percent of the vocational students took pre-algebra while only 15 percent of the nonvocational students took that course. This suggests that greater attention be given in high school to applying math in the vocational classes and to using some work-related applications in the math classes.

Vocational courses were perceived as useful not only by students considered by the state as official "vocational cluster" students but also by nonvocational students who took them. This suggests that greater attention be given to the benefits of nonvocational students enrolled in vocational classes.

Two areas of vocational education rated the lowest by students were the provision of information about vocational programs available after high school and the coordination of high school courses with related community college classes. These weaknesses have also been cited by secondary teachers. This suggests the need to provide better information to the high school teachers and counselors so they in turn can share it with students. Periodic meetings between secondary and postsecondary staff would also help to encourage this understanding and provide a basis for joint planning of programs.

Recommendations

Seven recommendations grew out of Oregon's recent experience in conducting a three year high school followup study that could lead to making future studies more useful for program planning and improvement.

1. Participating schools should identify key issues they face and the type of relevant information they might obtain from a followup study that would assist in improving excellence in education.
2. Schools should review any uses they made of former followup studies and determine why some information may have been useful while other findings were not useful.
3. When schools throughout a state are participating, it is helpful to have them work together to identify common core questions to be asked and allow them to add a few questions that may be unique to their school or district. This allows schools to have a statewide base to compare their core findings but also to address local issues of importance.
4. It is useful to combine followup surveys with an analysis of former students' transcripts and permanent records. Such an analysis can enable educators to identify patterns of participation in vocational education, for example, and thus allow a richer understanding of how various types of vocational students assess their high school experiences.
5. Schools need to allow time for staff and administrators to discuss their local followup study; compare local, district and statewide findings; and identify implications for improving vocational education and other areas of the curriculum.

6. Schools and districts should be encouraged to prepare local reports addressed to their administration and school board. News media releases combining the findings with any proposed new directions based on the results would also be helpful.

7. School and district staff should review the findings and decide if there are areas needing to be added or expanded in future studies. They can also decide which information was of relatively little use and replace such questions in the future.

REFERENCES

Campbell, P.B., Orth, M.N., and Seitz, P. Patterns of Participation in Secondary Vocational Education. A Report Based on Transcript and Interview Data of the 1979 and 1980 National Longitudinal Survey New Youth Cohort. Columbus, Ohio: The National Center for Research on Vocational Education, 1980.

Owens, T. R. Oregon High School Followup Study Statewide Findings. Prepared for the Oregon Department of Education, Division of Vocational Education and the Washington County Education Service District, October 1984.